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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,960	02/20/2004	Thomas A. Petersen	MIPS.0187-02-US	4828
23669 7590 07/31/2007 HUFFMAN LAW GROUP, P.C. 1900 MESA AVE. COLORADO SPRINGS, CO 80906			EXAMINER PORTKA, GARY J	
			ART UNIT 2188	PAPER NUMBER
			NOTIFICATION DATE 07/31/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO@HUFFMANLAW.NET

<b>Office Action Summary</b>	<b>Application No.</b> 10/783,960	<b>Applicant(s)</b> PETERSEN ET AL.	
	<b>Examiner</b> Gary J. Portka	<b>Art Unit</b> 2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11-29, 43-64, 70-72 and 74-93 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-29, 43-64, 70-72, and 74-93 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 7, 2007 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed May 7, 2007 have been considered but are moot in view of the new grounds of rejection.
3. Claims 53, 61, 72, and 83 have been amended, and claims 69 and 73 have been canceled by Applicants. Claims 11-29, 43-64, 70-72, and 74-93 are pending.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 72 and 74-93 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 72 recites "said initiated snoops" which lacks clear antecedent basis. It might be assumed that the "initiated snoops" are those snoops which are executed according to global order, one corresponding to each request. However, claim 83 refutes that assumption, since it expressly recites snoop

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logic for initiating snoops, and thus further confuses the limitation since it is not clear whether these are the same, or different snoops initiated as those already recited. The remaining cited claims incorporate these limitations by dependency.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 11-29, 43-64, 70-72, and 74-93 are rejected under 35 U.S.C. 102(e) as being anticipated by Hass et al., US 6,892,282 B2, herein "Hass".

8. As to claims 11-12, 43-48, 50, 52-58, 61-64, 70-72, 74-82, Hass discloses a microprocessor based system, multiphase protocol, method for coherence among agents that share a memory, medium with instructions that enable a processor, and memory controller that receives memory requests, assign a global order thereto, execute snoops therefor according to the global order, and respond thereto according to the global order. See Figs. 1-3 and 6, col. 4 line 49 to col. 5 line 67, col. 11 line 40 to col. 12 line 40, col. 17 lines 42-61, and col. 18 lines 34-46. The second tier cache functions of Hass may be considered a part of the functions of the claimed global arbiter (along with those of the global snoop controller of Hass). The second tier cache

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receives requests and orders those requests via the input queues shown in Fig. 6.

Since snoops for those requests are then placed on the snoop ring by the global snoop controller, those snoops remain in the order established for the requests, and thus the responses are also in the same order. A memory controller as recited in claim 11 is an inherent function of memory 26. Request, snoop, and response phases of claim 43 are shown in Fig. 2, while disparate fabrics involves a statement of intended use and is therefore not limiting. The method applied for providing latency independent coherence as recited in claim 53 is a statement of intended use and is not limiting.

9. As to claims 13-29, 49, and 51, the recited limitations are typical snooping system operations or configurations, and are disclosed or inherent to the system as cited hereinabove.

10. As to claims 59-60, and 83-93, responses are completed without regard to latencies as recited, since such dependency on latency is not described.

11. Claims 72 and 74-93 are rejected under 35 U.S.C. 102(b) as being anticipated by Neiger et al., US 6,112,283 (hereinafter "Neiger").

12. As to claims 72 and 74-93, Neiger discloses a memory controller coupled to a memory and plurality of agents, configured to receive memory requests, assign a global order thereto, execute according to the order a snoop corresponding to each request, and respond to each request according to the global order. See Neiger Summary, col. 4 lines 34-67 (global order is given to requests and they are responded to in order), col. 10 lines 43-59 (snoops are performed in node reception order), and col. 18 lines 54-56 (global order may be the same as node reception order). Neiger discloses ordering

logic for establishing a global order for the requests as ordering buffer 62, Fig. 4, and col. 7 lines 8-11. Insuring that initiated snoops conform to the global order to the extent claimed, since their results are distributed in global order (col. 10). The various dependent claim limitations including communicating queries, microprocessors//I/O devices, common and disparate buses, coherency, monitoring, etc. are disclosed in or inherent to the descriptions cited above.

### ***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary J. Portka whose telephone number is (571) 272-4211. The examiner can normally be reached on M-F 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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July 23, 2007

Gary J Portka  
Primary Examiner  
Art Unit 2188

**GARY PORTKA  
PRIMARY EXAMINER**

A handwritten signature in cursive script, reading "Gary J Portka".